AUTHOR INDEX

Adamson, A.J. *see* Whittet, D.C.B.
Aitken, D.K. *see* Whittet, D.C.B.
Alexander, P. *see* Fitt, A.J.
Alpar, M.A., Cheng, K.S., Pines, D., Shaham, J. The large glitch from PSR 0355+54 and its post-glitch relaxation, **233**, 25
Anderson, M.R., Lemos, J.P.S. Viscous shear in the Kerr metric, **233**, 489

Bailey, J., Hough, J.H., Wickramasinghe, D.T. Photometry and polarimetry of AM Herculis in its faint state, **233**, 395
Bailey, J.A. *see* Mead, A.R.G.
Barrett, P., O'Donoghue, D., Warner, B. Photometry of the intermediate polar TV Columbae, **233**, 759
Bhatt, H.C. Segregation of dust and abundance inhomogeneities in globular clusters, **233**, 867
Bode, M.F. *see* Whittet, D.C.B.
Boutron, C.F. Comment on the paper 'The cometary breakup hypothesis re-examined', **233**, 215
Brand, P.W.J.L. *see* Mead, A.R.G.
Brinks, E. *see* Dickey, J.M.

Caldwell, S.P., Dickens, R.J. A spectroscopic study of chemical abundances in the globular cluster Omega Centauri, **233**, 367
Caldwell, S.P. *see* Dickens, R.J.
Cameron, A.C. Equilibrium models for large stellar coronal loops, **233**, 235
Charles, P.A. *see* Naylor, T.
Charles, P.A. *see* Smale, A.P.
Cheng, K.S. *see* Alpar, M.A.
Coates, D.W. *see* Innis, J.L.
Cole, S., Kaiser, N. Sunyaev–Zel'dovich fluctuations in the cold dark matter scenario, **233**, 637
Corbet, R.H.D. *see* Smale, A.P.
Cox, M.J. *see* Fitt, A.J.
Crawford, I.A. High-resolution observations of interstellar Na I towards HD 174632, **233**, 923

Danese, L. *see* Franceschini, A.
Davies, J.I., Phillipps, S. The evolution of dwarf galaxies, **233**, 553
Davies, J.I. *see* Phillipps, S.
De Zotti, G. *see* Franceschini, A.
Dick, J.S.B. *see* Smith, F.G.
Dickens, R.J., Caldwell, S.P. On the intrinsic width of the giant branch in the globular cluster Omega Centauri, **233**, 677
Dickens, R.J. *see* Caldwell, S.P.
Dickey, J.M., Brinks, E. An HI absorption line survey of Messier 31, **233**, 781
Disney, M.J. *see* Phillipps, S.
Drew, J.E. *see* Naylor, T.

Echevarría, J. A statistical analysis of the emission line ratios in cataclysmic variables, **233**, 513

Fabian, A.C. *see* Johnstone, R.M.
Fadeyev, Yu., A. Carbon dust formation in R Coronae Borealis stars, **233**, 65
Fairall, A.P. Spectroscopic survey of southern compact and bright-nucleus galaxies – VII, **233**, 691
Fitt, A.J., Alexander, P., Cox, M.J. A two-temperature model for the infrared and radio emission from late-type galaxies, **233**, 907
Franceschini, A., Danese, L., De Zotti, G., Toffolatti, L. Analysis of a complete sample of galaxies at $m_z \leq 14.5$: the optical, radio and far-infrared luminosity functions, **233**, 157
Franceschini, A., Danese, L., De Zotti, G., Xu, C. *IRAS* source counts and cosmological evolution of actively star-forming galaxies, **233**, 175
Friend, M.T., Martin, J.S., Smith, R.C., Jones, D.H.P. The 8190 Å sodium doublet in cataclysmic variables – I. The Quest, **233**, 451

Gatley, I. *see* Yamashita, T.
Gerhard, O.E. *see* Louis, P.D.
Gondhalekar, P.M. *see* O'Brien, P.T.
Guilbert, P.W., Rees, M.J. 'Cold' material in non-thermal sources, **233**, 475

Hanami, H. Non-linear oscillations of the magnetosphere around neutron stars, **233**, 423
Hassall, B.J.M. *see* Naylor, T.
Hough, J.H. *see* Bailey, J.
Hough, J.H. *see* Mead, A.R.G.
Hough, J.H. *see* Yamashita, T.
Howarth, I.D. *see* Prinja, R.K.
Howell, S.B., Mason, K.O., Reichert, G.A., Warnock, A., Kreidl, T.J. US943: a 19th mag eclipsing cataclysmic variable with a period of $2^h3^m.8$, **233**, 79

Ilovaisky, S.A. *see* Smale, A.P.
Innis, J.L., Coates, D.W., Thompson, K. Observations of active-chromosphere stars – I. Spectroscopic study of AB Dor and PZ Tel **233**, 887

James, P.A. *see* Wright, G.S.
Johnstone, R.M., Fabian, A.C. Extended emission-line gas in NGC 1275 and the central galaxy in A1795: evidence for a distributed rather than a central source of ionization, **233**, 581
Jones, D.H.P. *see* Smith, F.G.
Jones, D.H.P. *see* Friend, M.T.
Jones, I.G. *see* White, G.L.
Jones, P.B. Neutron star magnetic field decay: Hall drift and Ohmic diffusion, **233**, 875
Joseph, R.D. *see* Wright, G.S.

Kaiser, N. *see* Cole, S.

Kilkenny, D., Marang, F., Menzies, J.W. Discovery of variability in the 'non-variable' hydrogen-deficient carbon stars, **233**, 209
Kreidl, T.J. *see* Howell, S.B.
Krishna Swamy, K.S., Shah, G.A. Nature of dust grains in comets, **233**, 573
Kumar, S. Twisted accretion discs – IV. Alignment in polytropic discs and low α limit, **233**, 33
Kurtz, D.W. A frequency analysis of new observations of the very low amplitude rapidly oscillating Ap star HD 203932, **233**, 565

LaViolette, P.A. Regarding the validity of polar trace metal data: a response, **233**, 221
Lemos, J.P.S. *see* Anderson, M.R.
Lemos, J.P.S. *see* Lynden-Bell, D.
Lewin, W.H.G. *see* van Paradijs, J.
Longmore, A.J. *see* Whittet, D.C.B.
Louis, P.D., Gerhard, O.E. Can galaxies oscillate? A self-consistent model of a non-stationary stellar system, **233**, 337
Lynden-Bell, D., Lemos, J.P.S. On Penston's self-similar solution for cold collapse, **233**, 197
Lyne, A.G., Pritchard, R.S., Smith, F.G. Crab Pulsar timing 1982–87, **233**, 667

McAdam, W.B. *see* White, G.L.
McFadzean, A.D. *see* Whittet, D.C.B.
Mallik, D.C.V. *see* Mallik, S.V.
Mallik, S.V., Mallik, D.C.V. Consequences of a chromospheric temperature rise on the formation of the Hα line in late-type supergiants, **233**, 649
Marang, F. *see* Kilkenny, D.
Martin, J.S. *see* Friend, M.T.
Mason, K.O. *see* Howell, S.B.
Mason, K.O. *see* Smale, A.P.
Meaburn, J. An extended high-speed flow from a compact, ionized knot in the Orion Nebula (M42), **233**, 791
Mead, A.R.G., Brand, P.W.J.L., Hough, J.H., Bailey, J.A. Polarimetric observations of the quasar, 3C 345, **233**, 503
Meikle, W.P.S. *see* Wright, G.S.
Menzies, J.W., Whitelock, P.A. *IRAS* 20056+1834: A G star reflects on its past, **233**, 697
Menzies, J.W. *see* Kilkenny, D.
Moore, T.J.T. *see* Yamashita, T.
Morrison, K. Photometric observations and interpretation of the extremely hydrogen-deficient binary Upsilon Sagittarii, **233**, 621
Motch, C. *see* Smale, A.P.
Mountain, C.M. *see* Yamashita, T.
Mukai, K. *see* Smale, A.P.

Naylor, T., Charles, P.A., Drew, J.E., Hassall, B.J.M. Spectroscopy of the M15 X-ray source: discovery of binary motion and an unusual systemic velocity, **233**, 285
Naylor, T., *see* Smale, A.P.
Needham, B.G., Rowan-Robinson, M. *IRAS* galaxies: evidence for a cosmological anisotropy?, **233**, 1P
Nelson, A.H. On the influence of galaxy magnetic fields on the rotation curves in the outer discs of galaxies, **233**, 115

O'Brien, P.T., Gondhalekar, P.M., Wilson, R. The ultraviolet continuum of quasars – I. The shape of the continuum, continuum reddening and intervening absorption, **233**, 801
O'Brien, P.T., Gondhalekar, P.M., Wilson, R. The ultraviolet continuum of quasars – II. Continuum variability, **233**, 845
O'Donoghue, D. *see* Warner, B.
O'Donoghue, D *see* Barrett, P.
Ostrowski, M. Acceleration of relativistic particles in shocks with oblique magnetic fields, **233**, 257

Padmanabhan, T., Subramanian, K. The focusing equation, caustics and the condition for multiple imaging by thick gravitational lenses, **233**, 265
Parmar, A.N. *see* Smale, A.P.
Penninx, W. *see* van Paradijs, J.
Penston, M.V. On the nature of the Broad Line Region clouds, **233**, 601
Phillipps, S. On the D_n– σ relation for elliptical galaxies, **233**, 561
Phillipps, S., Davies, J.I., Disney, M.J. Is there really a luminosity–surface brightness relation for dwarf galaxies?, **233**, 485
Phillipps, S. *see* Davies, J.I.
Pike, C.D. *see* Smith, F.G.
Pines, D. *see* Alpar, M.A.
Prinja, R.K., Howarth, I.D. Opacity enhancemnents in the stellar wind of 68 Cygni – not 'shells' or 'puffs', **233**, 123
Pritchard, R.S. *see* Lyne, A.G.

Rees, M.J. *see* Guilbert, P.W.
Reichert, G.A. *see* Howell, S.B.
Riley, J.M. The 408-MHz flux density scale on the Cambridge One-Mile Telescope, **233**, 225
Robertson, N.A. *see* Wright, G.S.
Roche, P.F. *see* Whittet, D.C.B.
Roth, M. The interstellar extinction law towards the open cluster TR-37, **233**, 773
Rowan-Robinson, M. *see* Needham, B.G.

Sanders, R.H. *see* Sellwood, J.A.
Sato, S. *see* Yamashita, T.
Sellwood, J.A., Sanders, R.H. A maximum disc model for the Galaxy, **233**, 611
Shah, G.A. *see* Krishna Swamy, K.S.
Shaham, J. *see* Alpar, M.A.
Shibata, S. Appearance of the trans-field flow in the pulsar magnetosphere, **233**, 405
Singal, A.K. Cosmic evolution of the physical sizes of extragalactic radio sources and their luminosity–size correlation, **233**, 87

Smale, A.P., Corbet, R.H.D., Charles, P.A., Ilovaisky, S.A., Mason, K.O., Motch, C., Mukai, K., Naylor, T., Parmar, A.N., van der Klis, M., van Paradijs, J. CAL 83: a 1-day period low-mass X-ray binary in the LMC, **233**, 51
Smith, F.G., Jones, D.H.P., Dick, J.S.B., Pike, C.D. The optical polarization of the Crab Pulsar, **233**, 305
Smith, F.G. *see* Lyne, A.G.
Smith, R.C. *see* Friend, M.T.
Subramanian, K. *see* Padmanabhan, T.
Suzuki, H. *see* Yamashita, T.

Tamura, M. *see* Yamashita, T.
Taylor, T. *see* Smale, A.P.
Thompson, K. *see* Innis, J.L.
Tinto, M. Erratum: Coincidence probabilities for a network of interferometric detectors of gravitational waves, **233**, 511
Toffolatti, L. *see* Franceschini, A.

van der Kliss, M. *see* Smale, A.P.
van Paradijs, J., Penninx, W., Lewin, W.H.G. On the relation between X-ray burst properties and the persistent X-ray luminosity, **233**, 437
van Paradijs, J. *see* Smale, A.P.

Warner, B., O'Donoghue, D. High-speed photometry of Z Chamaeleontis during outbursts, **233**, 705
Warner, B. *see* Barrett, P.
Warnock, A. *see* Howell, S.B.
White, G.L., McAdam, W.B., Jones, I.G. Observations of parallel radio sources 0211−479, 0214−480 and 0215−483, **233**, 189
Whitehurst, R. Numerical simulations of accretion discs – II. Design and implementation of a new numerical method, **233**, 529
Whitelock, P.A. *see* Menzies, J.W.
Whittet, D.C.B., Bode, M.F., Longmore, A.J., Adamson, A.J., McFadzean, A.D., Aitken, D.K., Roche, P.F. Infrared spectroscopy of dust in the Taurus dark clouds: ice and silicates, **233**, 321
Wickramasinghe, D.T. *see* Bailey, J.
Wilson, R. *see* O'Brien, P.T.
Wright, G.S., Joseph, R.D., Robertson, N.A., James, P.A., Meikle, W.P.S. Recent star formation in interacting galaxies – III. Evidence from mid-infrared photometry, **233**, 1

Xu, C. *see* Franceschini, A.

Yamashita, T., Sato, S., Tamura, M., Suzuki, H., Gatley, I., Hough, J.H., Mountain, C.M., Moore, T.J.T. Infrared reflection nebula in W75N, **233**, 899

Zdziarski, A.A. Thermal Comptonization in compact sources and the cosmic X-ray background, **233**, 739

SUBJECT INDEX

Abundance of the elements

Comment on the paper 'The cometary breakup hypothesis re-examined' (Boutron, C.F.), **233**, 215
Regarding the validity of polar trace metal data: a response (LaViolette, P.A.), **233**, 221
Segregation of dust and abundance inhomogeneities in globular clusters (Bhatt, H.C.), **233**, 867

Accretion and accretion discs

Twisted accretion discs – IV. Alignment in polytropic discs and low α limit (Kumar, S.), **233**, 33
On Penston's self-similar solution for cold collapse (Lynden-Bell, D., Lemos, J.P.S.), **233**, 197
Non-linear oscillations of the magnetosphere around neutron stars (Hanami, H.), **233**, 423
On the relation between X-ray burst properties and the persistent X-ray luminosity (van Paradijs, J., Penninx, W., Lewin, W.H.G.), **233**, 437
'Cold' material in non-thermal sources (Guilbert, P.W., Rees, M.J.), **233**, 475
Viscous shear in the Kerr metric (Anderson, M.R., Lemos, J.P.S.), **233**, 489
A statistical analysis of the emission line ratios in cataclysmic variables (Echevarría, J.), **233**, 513
Numerical simulations of accretion discs – II. Design and implementation of a new numerical method (Whitehurst, R.), **233**, 529
High-speed photometry of Z Chamaeleontis during outbursts (Warner, B., O'Donoghue, D.), **233**, 705
Thermal Comptonization in compact sources and the cosmic X-ray background (Zdziarski, A.A.), **233**, 739
Photometry of the intermediate polar TV Columbae (Barrett, P., O'Donoghue, D., Warner, B.), **233**, 759

Black holes

Viscous shear in the Kerr metric (Anderson, M.R., Lemos, J.P.S.), **233**, 489

Celestial mechanics

On Penston's self-similar solution for cold collapse (Lynden-Bell, D., Lemos, J.P.S.), **233**, 197
Can galaxies oscillate? A self-consistent model of a non-stationary stellar system (Louis, P.D., Gerhard, O.E.), **233**, 337

Comets

Comment on the paper 'The cometary breakup hypothesis re-examined' (Boutron, C.F.), **233**, 215
Regarding the validity of polar trace metal data: a response (LaViolette, P.A.), **233**, 221
Nature of dust grains in comets (Krishna Swamy, K.S., Shah, G.A.), **233**, 573

Cosmic rays

Acceleration of relativistic particles in shocks with oblique magnetic fields (Ostrowski, M.), **233**, 257

Cosmology

Cosmic evolution of the physical sizes of extragalactic radio sources and their luminosity–size correlation (Singal, A.K.), **233**, 87
IRAS source counts and cosmological evolution of actively star-forming galaxies (Franceschini, A., Danese, L., De Zotti, G., Xu, C.), **233**, 175
Sunyaev–Zel'dovich fluctuations in the cold dark matter scenario (Cole, S., Kaiser, N.), **233**, 637
The ultraviolet continuum of quasars – I. The shape of the continuum, continuum reddening and intervening absorption (O'Brien, P.T., Gondhalekar, P.M., Wilson, R.), **233**, 801
IRAS galaxies: evidence for a cosmological anisotropy? (Needham, B.G., Rowan-Robinson, M.), **233**, 1P

Earth

Comment on the paper 'The cometary breakup hypothesis re-examined' (Boutron, C.F.), **233**, 215
Regarding the validity of polar trace metal data: a response (LaViolette, P.A.), **233**, 221

Galactic structure and stellar dynamics

On the influence of galaxy magnetic fields on the rotation curves in the outer discs of galaxies (Nelson, A.H.), **233**, 115
Can galaxies oscillate? A self-consistent model of a non-stationary stellar system (Louis, P.D., Gerhard, O.E.), **233**, 337
The evolution of dwarf galaxies (Davies, J.I., Phillipps, S.), **233**, 553

On the D_n– σ relation for elliptical galaxies (Phillipps, S.), **233**, 561
A maximum disc model for the Galaxy (Sellwood, J.A., Sanders, R.H.), **233**, 611

Galaxies

On the influence of galaxy magnetic fields on the rotation curves in the outer discs of galaxies (Nelson, A.H.), **233**, 115
Analysis of a complete sample of galaxies at $m_z \leqslant 14.5$: the optical, radio and far-infrared luminosity functions (Franceschini, A., Danese, L., De Zotti, G., Toffolatti, L.), **233**, 157
Can galaxies oscillate? A self-consistent model of a non-stationary stellar system (Louis, P.D., Gerhard, O.E.), **233**, 337
Is there really a luminosity–surface brightness relation for dwarf galaxies? (Phillipps, S., Davies, J.I., Disney, M.J.), **233**, 485
The evolution of dwarf galaxies (Davies, J.I., Phillipps, S.), **233**, 553
On the D_n– σ relation for elliptical galaxies (Phillipps, S.), **233**, 561
An HI absorption line survey of Messier 31 (Dickey, J.M., Brinks, E.), **233**, 781
A two-temperature model for the infrared and radio emission from late-type galaxies (Fitt, A.J., Alexander, P., Cox, M.J.), **233**, 907
IRAS galaxies: evidence for a cosmological anisotropy? (Needham, B.G., Rowan-Robinson, M.), **233**, 1P

Galaxies – active

Recent star formation in interacting galaxies – III. Evidence from mid-infrared photometry (Wright, G.S., Joseph, R.D., Robertson, N.A., James, P.A., Meikle, W.P.S.), **233**, 1
Cosmic evolution of the physical sizes of extragalactic radio sources and their luminosity–size correlation (Singal, A.K.), **233**, 87
Analysis of a complete sample of galaxies at $m_z \leqslant 14.5$: the optical, radio and far-infrared luminosity functions (Franceschini, A., Danese, L., De Zotti, G., Toffolatti, L.), **233**, 157
IRAS source counts and cosmological evolution of actively star-forming galaxies (Franceschini, A., Danese, L., De Zotti, G., Xu, C.), **233**, 175
Observations of parallel radio sources 0211−479, 0214−480 and 0215−483 (White, G.L., McAdam, W.B., Jones, I.G.), **233**, 189
'Cold' material in non-thermal sources (Guilbert, P.W., Rees, M.J.), **233**, 475
Extended emission-line gas in NGC 1275 and the central galaxy in A1795: evidence for a distributed rather than a central source of ionization (Johnstone, R.M.. Fabian, A.C.), **233**, 581
On the nature of the Broad Line Region clouds (Penston, M.V.), **233**, 601
Thermal Comptonization in compact sources and the cosmic X-ray background (Zdziarski, A A.). **233**, 739

Galaxies – nuclei of

Recent star formation in interacting galaxies – III. Evidence from mid-infrared photometry (Wright, G.S., Joseph, R.D., Robertson, N.A., James, P.A., Meikle, W.P.S.), **233**, 1
Spectroscopic survey of southern compact and bright-nucleus galaxies – VII (Fairall, A.P.), **233**, 691

Galaxies – Seyfert

Analysis of a complete sample of galaxies at $m_z \leqslant 14.5$: the optical, radio and far-infrared luminosity functions (Franceschini, A., Danese, L., De Zotti, G., Toffolatti, L.), **233**, 157
Spectroscopic survey of southern compact and bright-nucleus galaxies – VII (Fairall, A.P.), **233**, 691

Galaxy clusters

Is there really a luminosity–surface brightness relation for dwarf galaxies? (Phillipps, S., Davies, J.I., Disney, M.J.), **233**, 485
Sunyaev–Zel'dovich fluctuations in the cold dark matter scenario (Cole, S., Kaiser, N.), **233**, 637
IRAS galaxies: evidence for a cosmological anisotropy? (Needham, B.G., Rowan-Robinson, M.), **233**, 1P

Gravitation and gravitational radiation

On Penston's self-similar solution for cold collapse (Lynden-Bell, D., Lemos, J.P.S.), **233**, 197
The focusing equation, caustics and the condition for multiple imaging by thick gravitational lenses (Padmanabhan, T., Subramanian, K.), **233**, 265
Viscous shear in the Kerr metric (Anderson, M.R., Lemos, J.P.S.), **233**, 489
Erratum: Coincidence probabilities for a network of interferometric detectors of gravitational waves (Tinto, M.), **233**, 511

Infrared astronomy

Recent star formation in interacting galaxies – III. Evidence from mid-infrared photometry (Wright, G.S., Joseph, R.D., Robertson, N.A., James, P.A., Meikle, W.P.S.), **233**, 1

IRAS source counts and cosmological evolution of actively star-forming galaxies (Franceschini, A., Danese, L., De Zotti, G., Xu, C.), **233**, 175
The 408-MHz flux density scale on the Cambridge One-Mile Telescope (Riley, J.M.), **233**, 225
Analysis of a complete sample of galaxies at $m_z \leqslant 14.5$: the optical, radio and far-infrared luminosity functions (Franceschini, A., Danese, L., De Zotti, G., Toffolatti, L.), **233**, 157
Infrared spectroscopy of dust in the Taurus dark clouds: ice and silicates (Whittet, D.C.B., Bode, M.F., Longmore, A.J., Adamson, A.J., McFadzean, A.D., Aitken, D.K., Roche, P.F.), **233**, 321
The 8190 Å sodium doublet in cataclysmic variables – I. The Quest (Friend, M.T., Martin, J.S., Smith, R.C., Jones, D.H.P.), **233**, 451
IRAS 20056+1834: A G star reflects on its past (Menzies, J.W., Whitelock, P.A.), **233**, 697
Infrared reflection nebula in W75N (Yamashita, T., Sato, S., Tamura, M., Suzuki, H., Gatley, I., Hough, J.H., Mountain, C.M., Moore, T.J.T.), **233**, 899
A two-temperature model for the infrared and radio emission from late-type galaxies (Fitt, A.J., Alexander, P., Cox, M.J.), **233**, 907
IRAS galaxies: evidence for a cosmological anisotropy? (Needham, B.G., Rowan-Robinson, M.), **233**, 1P

Instruments and techniques

Erratum: Coincidence probabilities for a network of interferometric detectors of gravitational waves (Tinto, M.), **233**, 511

Intergalactic medium

The ultraviolet continuum of quasars – I. The shape of the continuum, continuum reddening and intervening absorption (O'Brien, P.T., Gondhalekar, P.M., Wilson, R.), **233**, 801

Interstellar dust

Nature of dust grains in comets (Krishna Swamy, K.S., Shah, G.A.), **233**, 573

Interstellar grains

Carbon dust formation in R Coronae Borealis stars (Fadeyev, Yu., A.), **233**, 65
Infrared spectroscopy of dust in the Taurus dark clouds: ice and silicates (Whittet, D.C.B., Bode, M.F., Longmore, A.J., Adamson, A.J., McFadzean, A.D., Aitken, D.K., Roche, P.F.), **233**, 321
IRAS 20056+1834: A G star reflects on its past (Menzies, J.W., Whitelock, P.A.), **233**, 697
The interstellar extinction law towards the open cluster TR-37 (Roth, M.), **233**, 773
Segregation of dust and abundance inhomogeneities in globular clusters (Bhatt, H.C.), **233**, 867
Infrared reflection nebula in W75N (Yamashita, T., Sato, S., Tamura, M., Suzuki, H., Gatley, I., Hough, J.H., Mountain, C.M., Moore, T.J.T.), **233**, 899

Interstellar medium

On the influence of galaxy magnetic fields on the rotation curves in the outer discs of galaxies (Nelson, A.H.), **233**, 115
Extended emission-line gas in NGC 1275 and the central galaxy in A1795: evidence for a distributed rather than a central source of ionization (Johnstone, R.M., Fabian, A.C.), **233**, 581
An H I absorption line survey of Messier 31 (Dickey, J.M., Brinks, E.), **233**, 781
High-resolution observations of interstellar Na I towards HD 174632 (Crawford, I.A.), **233**, 923

Magellanic Clouds

CAL 83: a 1-day period low-mass X-ray binary in the LMC (Smale, A.P., Corbet, R.H.D., Charles, P.A., Ilovaisky, S.A., Mason, K.O., Motch, C., Mukai, K., Naylor, T., Parmar, A.N., van der Klis, M., van Paradijs, J.), **233**, 51

Microwave background

Sunyaev–Zel'dovich fluctuations in the cold dark matter scenario (Cole, S., Kaiser, N.), **233**, 637

Molecules and molecular clouds

Infrared spectroscopy of dust in the Taurus dark clouds: ice and silicates (Whittet, D.C.B., Bode, M.F., Longmore, A.J., Adamson, A.J., McFadzean, A.D., Aitken, D.K., Roche, P.F.), **233**, 321

Nebulae – gaseous

Extended emission-line gas in NGC 1275 and the central galaxy in A1795: evidence for a distributed rather than a central source of ionization (Johnstone, R.M., Fabian, A.C.), **233**, 581
An extended high-speed flow from a compact, ionized knot in the Orion Nebula (M42) (Meaburn, J.), **233**, 791

Nebulae – reflection

Infrared reflection nebula in W75N (Yamashita, T., Sato, S., Tamura, M., Suzuki, H., Gatley, I., Hough, J.H., Mountain, C.M., Moore, T.J.T.), **233**, 899

Neutron stars

The large glitch from PSR 0355+54 and its post-glitch relaxation (Alpar, M.A., Cheng, K.S., Pines, D., Shaham, J.), **233**, 25
Appearance of the trans-field flow in the pulsar magnetosphere (Shibata, S.), **233**, 405
Non-linear oscillations of the magnetosphere around neutron stars (Hanami, H.), **233**, 423
On the relation between X-ray burst properties and the persistent X-ray luminosity (van Paradijs, J., Penninx, W., Lewin, W.H.G.), **233**, 437
Crab Pulsar timing 1982–87 (Lyne, A.G., Pritchard, R.S., Smith, F.G.), **233**, 667
Neutron star magnetic field decay: Hall drift and Ohmic diffusion (Jones, P.B.), **233**, 875

Novae

US943: a 19th mag eclipsing cataclysmic variable with a period of $2^h3^m.8$ (Howell, S.B., Mason, K.O., Reichert, G.A., Warnock, A., Kreidl, T.J.), **233**, 79
Numerical simulations of accretion discs – II. Design and implementation of a new numerical method (Whitehurst, R.), **233**, 529
High-speed photometry of Z Chamaeleontis during outbursts (Warner, B., O'Donoghue, D.), **233**, 705

Photometry – non-stellar

The ultraviolet continuum of quasars – II. Continuum variability (O'Brien, P.T., Gondhalekar, P.M., Wilson, R.), **233**, 845

Physical processes

The large glitch from PSR 0355+54 and its post-glitch relaxation (Alpar, M.A., Cheng, K.S., Pines, D., Shaham, J.), **233**, 25
On the influence of galaxy magnetic fields on the rotation curves in the outer discs of galaxies (Nelson, A.H.), **233**, 115
On Penston's self-similar solution for cold collapse (Lynden-Bell, D., Lemos, J.P.S.), **233**, 197
Equilibrium models for large stellar coronal loops (Cameron, A.C.), **233**, 235
Acceleration of relativistic particles in shocks with oblique magnetic fields (Ostrowski, M.), **233**, 257
The focusing equation, caustics and the condition for multiple imaging by thick gravitational lenses (Padmanabhan, T., Subramanian, K.), **233**, 265
Appearance of the trans-field flow in the pulsar magnetosphere (Shibata, S.), **233**, 405
Viscous shear in the Kerr metric (Anderson, M.R., Lemos, J.P.S.), **233**, 489
Numerical simulations of accretion discs – II. Design and implementation of a new numerical method (Whitehurst, R.), **233**, 529
Thermal Comptonization in compact sources and the cosmic X-ray background (Zdziarski, A.A.), **233**, 739
Neutron star magnetic field decay: Hall drift and Ohmic diffusion (Jones, P.B.), **233**, 875

Polarization of starlight

The optical polarization of the Crab Pulsar (Smith, F.G., Jones, D.H.P., Dick, J.S.B., Pike, C.D.), **233**, 305
Photometry and polarimetry of AM Herculis in its faint state (Bailey, J., Hough, J.H., Wickramasinghe, D.T.), **233**, 395
Polarimetric observations of the quasar 3C 345 (Mead, A.R.G., Brand, P.W.J.L., Hough, J.H., Bailey, J.A.), **233**, 503
Infrared reflection nebula in W75N (Yamashita, T., Sato, S., Tamura, M., Suzuki, H., Gatley, I., Hough, J.H., Mountain, C.M., Moore, T.J.T.), **233**, 899

Pulsars

The large glitch from PSR 0355+54 and its post-glitch relaxation (Alpar, M.A., Cheng, K.S., Pines, D., Shaham, J.), **233**, 25
The optical polarization of the Crab Pulsar (Smith, F.G., Jones, D.H.P., Dick, J.S.B., Pike, C.D.), **233**, 305
Appearance of the trans-field flow in the pulsar magnetosphere (Shibata, S.), **233**, 405
Crab Pulsar timing 1982–87 (Lyne, A.G., Pritchard, R.S., Smith, F.G.), **233**, 667

Quasars

Cosmic evolution of the physical sizes of extragalactic radio sources and their luminosity–size correlation (Singal, A.K.), **233**, 87
The focusing equation, caustics and the condition for multiple imaging by thick gravitational lenses (Padmanabhan, T., Subramanian, K.), **233**, 265
Polarimetric observations of the quasar 3C 345 (Mead, A.R.G., Brand, P.W.J.L., Hough, J.H., Bailey, J.A.), **233**, 503
On the nature of the Broad Line Region clouds (Penston, M.V.), **233**, 601

The ultraviolet continuum of quasars – I. The shape of the continuum, continuum reddening and intervening absorption (O'Brien, P.T., Gondhalekar, P.M., Wilson, R.), **233**, 801
The ultraviolet continuum of quasars – II. Continuum variability (O'Brien, P.T., Gondhalekar, P.M., Wilson, R.), **233**, 845

Radiative transfer

The focusing equation, caustics and the condition for multiple imaging by thick gravitational lenses (Padmanabhan, T., Subramanian, K.), **233**, 265
Consequences of a chromospheric temperature rise on the formation of the Hα line in late-type supergiants (Mallik, S.V., Mallik, D.C.V.), **233**, 649

Radio astronomy

Cosmic evolution of the physical sizes of extragalactic radio sources and their luminosity–size correlation (Singal, A.K.), **233**, 87
Analysis of a complete sample of galaxies at $m_z \leqslant 14.5$: the optical, radio and far-infrared luminosity functions (Franceschini, A., Danese, L., De Zotti, G., Toffolatti, L.), **233**, 157
Observations of parallel radio sources 0211−479, 0214−480 and 0215−483 (White, G.L., McAdam, W.B., Jones, I.G.), **233**, 189
The 408-MHz flux density scale on the Cambridge One-Mile Telescope (Riley, J.M.), **233**, 225
An HI absorption line survey of Messier 31 (Dickey, J.M., Brinks, E.), **233**, 781
A two-temperature model for the infrared and radio emission from late-type galaxies (Fitt, A.J., Alexander, P., Cox, M.J.), **233**, 907

Stars – atmospheres of

Carbon dust formation in R Coronae Borealis stars (Fadeyev, Yu., A.), **233**, 65
Equilibrium models for large stellar coronal loops (Cameron, A.C.), **233**, 235
On the nature of the Broad Line Region clouds (Penston, M.V.), **233**, 601
Consequences of a chromospheric temperature rise on the formation of the Hα line in late-type supergiants (Mallik, S.V., Mallik, D.C.V.), **233**, 649
Observations of active-chromosphere stars – I. Spectroscopic study of AB Dor and PZ Tel (Innis, J.L., Coates, D.W., Thompson, K.), **233**, 887

Stars – binary

CAL 83: a 1-day period low-mass X-ray binary in the LMC (Smale, A.P., Corbet, R.H.D., Charles, P.A., Ilovaisky, S.A., Mason, K.O., Motch, C., Mukai, K., Naylor, T., Parmar, A.N., van der Klis, M., van Paradijs, J.), **233**, 51
US943: a 19th mag eclipsing cataclysmic variable with a period of $2^h3^m.8$ (Howell, S.B., Mason, K.O., Reichert, G.A., Warnock, A., Kreidl, T.J.), **233**, 79
Spectroscopy of the M15 X-ray source: discovery of binary motion and an unusual systemic velocity (Naylor, T., Charles, P.A., Drew, J.E., Hassall, B.J.M.), **233**, 285
Photometry and polarimetry of AM Herculis in its faint state (Bailey, J., Hough, J.H., Wickramasinghe, D.T.), **233**, 395
A statistical analysis of the emission line ratios in cataclysmic variables (Echevarría, J.), **233**, 513
Numerical simulations of accretion discs – II. Design and implementation of a new numerical method (Whitehurst, R.), **233**, 529
Photometric observations and interpretation of the extremely hydrogen-deficient binary Upsilon Sagittarii (Morrison, K.), **233**, 621
High-speed photometry of Z Chamaeleontis during outbursts (Warner, B., O'Donoghue, D.), **233**, 705
Photometry of the intermediate polar TV Columbae (Barrett, P., O'Donoghue, D., Warner, B.), **233**, 759

Stars – chemical composition of

A spectroscopic study of chemical abundances in the globular cluster Omega Centauri (Caldwell, S.P., Dickens, R.J.), **233**, 367
On the intrinsic width of the giant branch in the globular cluster Omega Centauri (Dickens, R.J., Caldwell, S.P.), **233**, 677
Segregation of dust and abundance inhomogeneities in globular clusters (Bhatt, H.C.), **233**, 867

Stars – clusters of

A spectroscopic study of chemical abundances in the globular cluster Omega Centauri (Caldwell, S.P., Dickens, R.J.), **233**, 367
On the intrinsic width of the giant branch in the globular cluster Omega Centauri (Dickens, R.J., Caldwell, S.P.), **233**, 677
The interstellar extinction law towards the open cluster TR-37 (Roth, M.), **233**, 773
Segregation of dust and abundance inhomogeneities in globular clusters (Bhatt, H.C.), **233**, 867

Stars – formation of

Recent star formation in interacting galaxies – III. Evidence from mid-infrared photometry (Wright, G.S., Joseph, R.D., Robertson, N.A., James, P.A., Meikle, W.P.S.), **233**, 1
The evolution of dwarf galaxies (Davies, J.I., Phillipps, S.), **233**, 553
A two-temperature model for the infrared and radio emission from late-type galaxies (Fitt, A.J., Alexander, P., Cox, M.J.), **233**, 907

Stars – magnetic fields in

Equilibrium models for large stellar coronal loops (Cameron, A.C.), **233**, 235
Appearance of the trans-field flow in the pulsar magnetosphere (Shibata, S.), **233**, 405
Non-linear oscillations of the magnetosphere around neutron stars (Hanami, H.), **233**, 423
Photometry of the intermediate polar TV Columbae (Barrett, P., O'Donoghue, D., Warner, B.), **233**, 759
Neutron star magnetic field decay: Hall drift and Ohmic diffusion (Jones, P.B.), **233**, 875

Stars – mass loss from

Opacity enhancemnents in the stellar wind of 68 Cygni – not 'shells' or 'puffs' (Prinja, R.K., Howarth, I.D.), **233**, 123
Consequences of a chromospheric temperature rise on the formation of the Hα line in late-type supergiants (Mallik, S.V., Mallik, D.C.V.), **233**, 649
IRAS 20056+1834: A G star reflects on its past (Menzies, J.W., Whitelock, P.A.), **233**, 697
An extended high-speed flow from a compact, ionized knot in the Orion Nebula (M42) (Meaburn, J.), **233**, 791

Stars – photometry of

CAL 83: a 1-day period low-mass X-ray binary in the LMC (Smale, A.P., Corbet, R.H.D., Charles, P.A., Ilovaisky, S.A., Mason, K.O., Motch, C., Mukai, K., Naylor, T., Parmar, A.N., van der Klis, M., van Paradijs, J.), **233**, 51
US943: a 19th mag eclipsing cataclysmic variable with a period of $2^h3^m.8$ (Howell, S.B., Mason, K.O., Reichert, G.A., Warnock, A., Kreidl, T.J.), **233**, 79
Discovery of variability in the 'non-variable' hydrogen-deficient carbon stars (Kilkenny, D., Marang, F., Menzies, J.W.), **233**, 209
Photometry and polarimetry of AM Herculis in its faint state (Bailey, J., Hough, J.H., Wickramasinghe, D.T.), **233**, 395
A frequency analysis of new observations of the very low amplitude rapidly oscillating Ap star HD 203932 (Kurtz, D.W.), **233**, 565
Photometric observations and interpretation of the extremely hydrogen-deficient binary Upsilon Sagittarii (Morrison, K.), **233**, 621
IRAS 20056+1834: A G star reflects on its past (Menzies, J.W., Whitelock, P.A.), **233**, 697
High-speed photometry of Z Chamaeleontis during outbursts (Warner, B., O'Donoghue, D.), **233**, 705
Photometry of the intermediate polar TV Columbae (Barrett, P., O'Donoghue, D., Warner, B.), **233**, 759
The interstellar extinction law towards the open cluster TR-37 (Roth, M.), **233**, 773

Stars – rotation of

Crab Pulsar timing 1982–87 (Lyne, A.G., Pritchard, R.S., Smith, F.G.), **233**, 667

Stars – spectroscopy of

Opacity enhancemnents in the stellar wind of 68 Cygni – not 'shells' or 'puffs' (Prinja, R.K., Howarth, I.D.), **233**, 123
Spectroscopy of the M15 X-ray source: discovery of binary motion and an unusual systemic velocity (Naylor, T., Charles, P.A., Drew, J.E., Hassall, B.J.M.), **233**, 285
A spectroscopic study of chemical abundances in the globular cluster Omega Centauri (Caldwell, S.P., Dickens, R.J.), **233**, 367
The 8190 Å sodium doublet in cataclysmic variables – I. The Quest (Friend, M.T., Martin, J.S., Smith, R.C., Jones, D.H.P.), **233**, 451
A statistical analysis of the emission line ratios in cataclysmic variables (Echevarría, J.), **233**, 513
Consequences of a chromospheric temperature rise on the formation of the Hα line in late-type supergiants (Mallik, S.V., Mallik, D.C.V.), **233**, 649
IRAS 20056+1834: A G star reflects on its past (Menzies, J.W., Whitelock, P.A.), **233**, 697
An extended high-speed flow from a compact, ionized knot in the Orion Nebula (M42) (Meaburn, J.), **233**, 791
Observations of active-chromosphere stars – I. Spectroscopic study of AB Dor and PZ Tel (Innis, J.L., Coates, D.W., Thompson, K.), **233**, 887
High-resolution observations of interstellar Na I towards HD 174632 (Crawford, I.A.), **233**, 923

Stars – structure and evolution of

On the intrinsic width of the giant branch in the globular cluster Omega Centauri (Dickens, R.J., Caldwell, S.P.), **233**, 677

Stars – variable

CAL 83: a 1-day period low-mass X-ray binary in the LMC (Smale, A.P., Corbet, R.H.D., Charles, P.A., Ilovaisky, S.A., Mason, K.O., Motch, C., Mukai, K., Naylor, T., Parmar, A.N., van der Klis, M., van Paradijs, J.), **233**, 51
Carbon dust formation in R Coronae Borealis stars (Fadeyev, Yu., A.), **233**, 65
US943: a 19th mag eclipsing cataclysmic variable with a period of $2^h3^m.8$ (Howell, S.B., Mason, K.O., Reichert, G.A., Warnock, A., Kreidl, T.J.), **233**, 79
Discovery of variability in the 'non-variable' hydrogen-deficient carbon stars (Kilkenny, D., Marang, F., Menzies, J.W.), **233**, 209
Photometry and polarimetry of AM Herculis in its faint state (Bailey, J., Hough, J.H., Wickramasinghe, D.T.), **233**, 395
The 8190 Å sodium doublet in cataclysmic variables – I. The Quest (Friend, M.T., Martin, J.S., Smith, R.C., Jones, D.H.P.), **233**, 451
A statistical analysis of the emission line ratios in cataclysmic variables (Echevarría, J.), **233**, 513
Numerical simulations of accretion discs – II. Design and implementation of a new numerical method (Whitehurst, R.), **233**, 529
A frequency analysis of new observations of the very low amplitude rapidly oscillating Ap star HD 203932 (Kurtz, D.W.), **233**, 565
Photometric observations and interpretation of the extremely hydrogen-deficient binary Upsilon Sagittarii (Morrison, K.), **233**, 621
Photometry of the intermediate polar TV Columbae (Barrett, P., O'Donoghue, D., Warner, B.), **233**, 759

Stars – velocities of

Spectroscopy of the M15 X-ray source: discovery of binary motion and an unusual systemic velocity (Naylor, T., Charles, P.A., Drew, J.E., Hassall, B.J.M.), **233**, 285
Observations of active-chromosphere stars – I. Spectroscopic study of AB Dor and PZ Tel (Innis, J.L., Coates, D.W., Thompson, K.), **233**, 887

Supernovae and supernova remnants

Acceleration of relativistic particles in shocks with oblique magnetic fields (Ostrowski, M.), **233**, 257

Ultraviolet astronomy

The ultraviolet continuum of quasars – I. The shape of the continuum, continuum reddening and intervening absorption (O'Brien, P.T., Gondhalekar, P.M., Wilson, R.), **233**, 801
The ultraviolet continuum of quasars – II. Continuum variability (O'Brien, P.T., Gondhalekar, P.M., Wilson, R.), **233**, 845

X-ray astronomy

CAL 83: a 1-day period low-mass X-ray binary in the LMC (Smale, A.P., Corbet, R.H.D., Charles, P.A., Ilovaisky, S.A., Mason, K.O., Motch, C., Mukai, K., Naylor, T., Parmar, A.N., van der Klis, M., van Paradijs, J.), **233**, 51
Spectroscopy of the M15 X-ray source: discovery of binary motion and an unusual systemic velocity (Naylor, T., Charles, P.A., Drew, J.E., Hassall, B.J.M.), **233**, 285
Non-linear oscillations of the magnetosphere around neutron stars (Hanami, H.), **233**, 423
On the relation between X-ray burst properties and the persistent X-ray luminosity (van Paradijs, J., Penninx, W., Lewin, W.H.G.), **233**, 437
'Cold' material in non-thermal sources (Guilbert, P.W., Rees, M.J.), **233**, 475
Thermal Comptonization in compact sources and the cosmic X-ray background (Zdziarski, A.A.), **233**, 739